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UNITED STATES

PRELIMINARY VIEW

1999 WORLD RADIOCOMMUNICATION CONFERENCE PREPARATION

IWG8/018
DATE: April 22, 1998

ISSUE: Operation of Earth Stations on Board Vessels in the Fixed-Satellite Service in the Bands 3700-4200 MHz and 5925-6425 MHz and Coordination with Other Services Allocated to These Bands

AGENDA ITEM: Agenda Item 1.8, Resolution 721

BACKGROUND: This item concerns provision of broadband communications in the maritime context by earth stations on board vessels using frequencies and existing space segment in the fixed-satellite service. These facilities operate in three distinct modes: (i) at sea; (ii) while stationary in port; and (iii) in-motion along designated sea lanes while approaching or departing from port. This agenda item was proposed by the United States to WRC-97 and was approved for the WRC-99 agenda. The item is assigned to Study Group 4-9S; Study Group 1 is listed as an interested group to provide guidance on associated regulatory issues. A Working Paper (Document 4-9S/13-E) was approved for submission by the U.S. to the first international meeting of ITU-R WP 4-9S. A related document, Document 4-9S/8, was submitted by Japan to that meeting; these documents were reconciled in a Draft New Report (Doc. 4-9S/TEMP/39). The Draft New Report contains the working plan for a Correspondence Group to complete all associated technical studies by the next international WP 4-9S meeting. This agenda item has the support of several other administrations, some of which are expected to make contributions at that meeting.

U.S. VIEW: The U.S. considers that operations at sea (beyond the as-yet-to-be-determined distance for near-shore coordination) by earth stations on board vessels in the fixed-satellite service do not present potential for interference to terrestrial stations and need not be coordinated. Operations while these facilities are stationary in port are being coordinated in the U.S. as fixed-satellite earth stations. Technical and regulatory issues remaining for resolution concern the potential for interference between in-motion operations by these facilities while close to shore and terrestrial stations in the fixed service. This view is consistent with the attached work plan adopted for the Correspondence Group.

ANNEX 1

Correspondence group Work Plan

Working Party 4-9S has determined that there is need for further study by a correspondence group on the following three topics.

1) Determination of the coordination requirements for earth stations on vessels including but not limited to:

- Technical characteristics of earth stations on vessels;
- Operating constraints that may be used to mitigate or eliminate the need for coordination;
- In-motion aspects that may be useful in determining the potential for interference;
- Propagation effects that may be important in determining coordination area;
- Automatic controls for exclusionary zones.

2) Demonstration of the proposed coordination method between an earth station on a vessel and stations in the Fixed Service including but not limited to:

- Example coordination and calculations of the potential interference;
- Validation of coordination results through a simulation.

3) Consider inputs resulting from Questions ITU-R [Doc. 4-9S/TEMP/21]/4 and [Doc. 4-9S/TEMP/23]/9:

- Conditions for sharing with stations in the fixed-satellite service;
- Conditions for sharing with stations in the fixed service.

These studies must be completed in time for the results to be reported at WP 4-9S's next meeting, 28 September - 3 October 1998.
The assigned chair person for this correspondence group is:

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